

FIG. 2

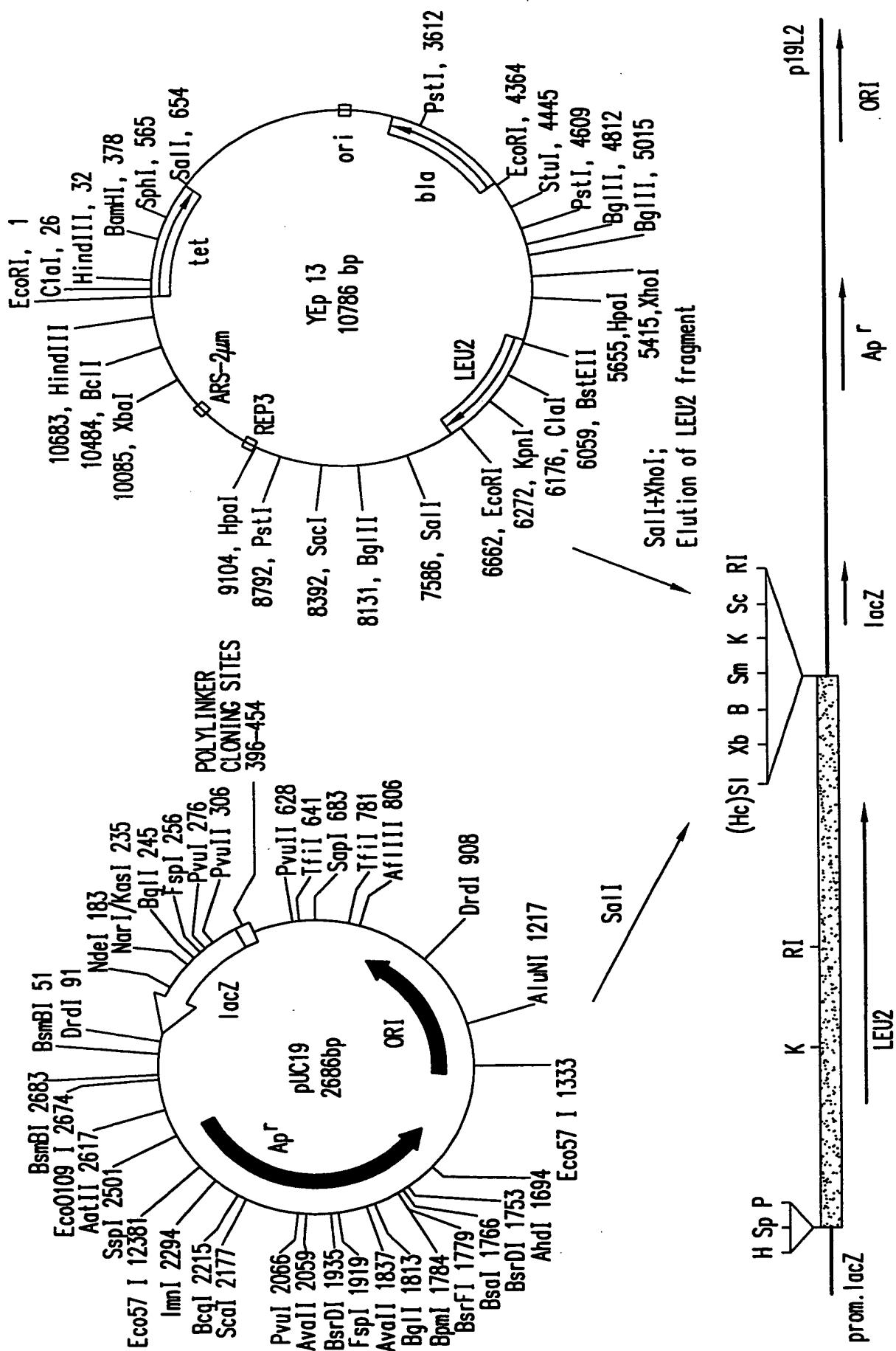


FIG. 3

Appl. No. 09/903,508; Filed: July 13, 2001
Docket No. 533.0830003/MAC/RGM; Group Art Unit: 1645
Inventor(s): Abbas *et al.*; Tel: 202/371-2600
Title: Transformation Systems for Flavinogenic Yeast

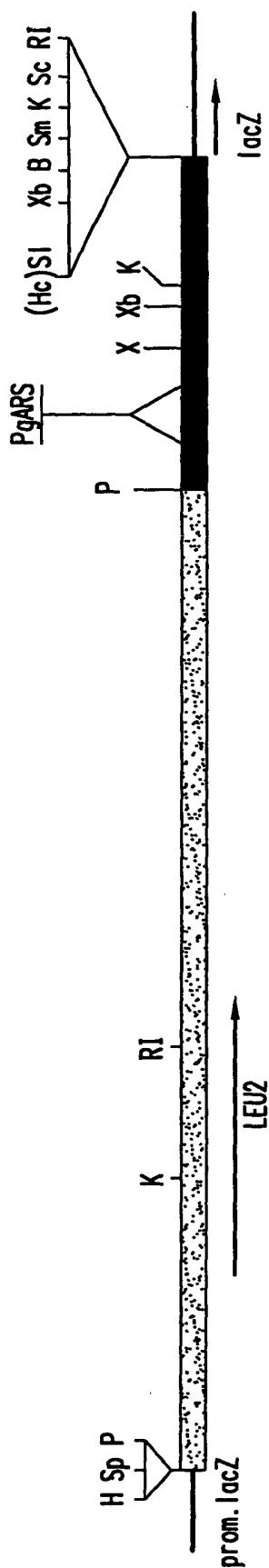


FIG. 4

Appl. No. 09/903,508; Filed: July 13, 2001
 Dkt. No. 33.0830003/MAC/RGM; Group Art Unit: 1645
 Inventor: Abbas *et al.*; Tel: 202/371-2600
 Title: Transformation Systems for Flavinogenic Yeast

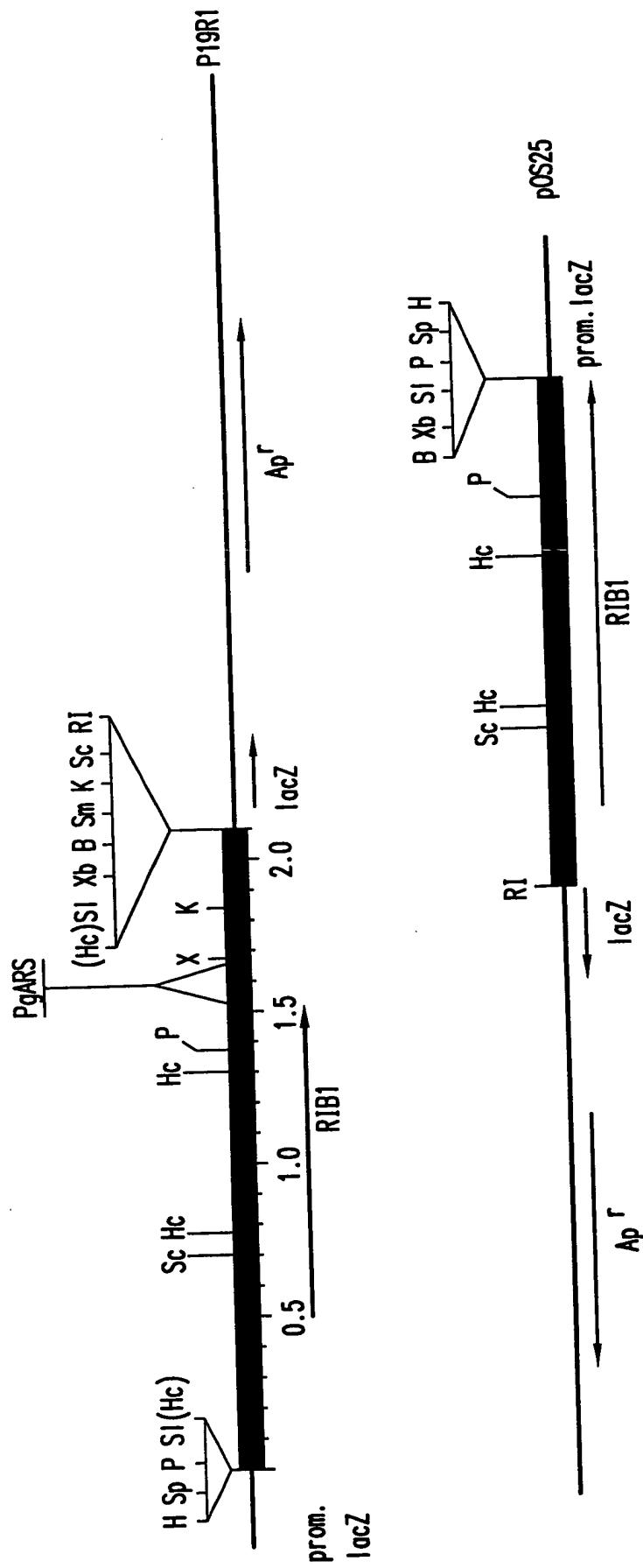


FIG. 5

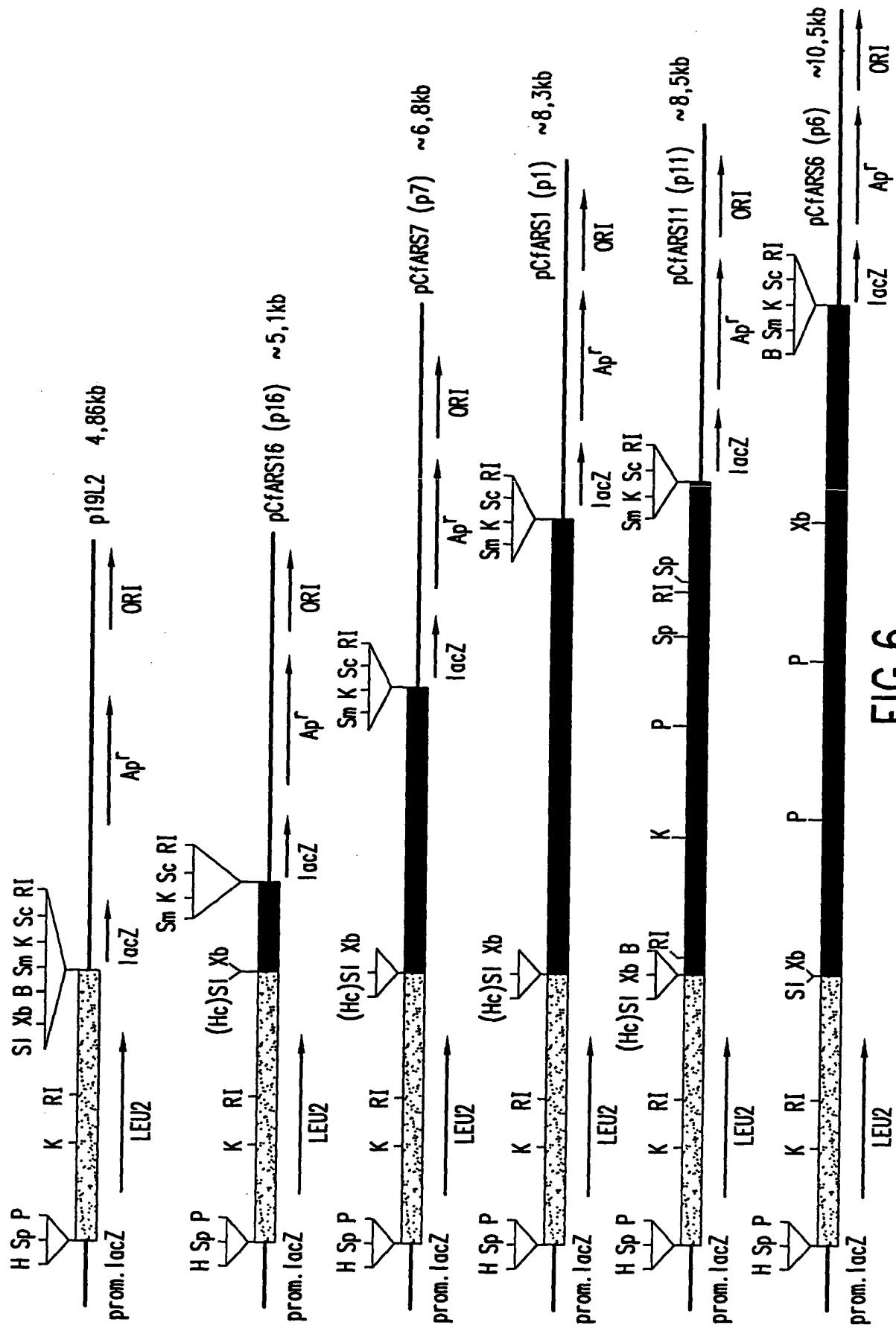


FIG. 6

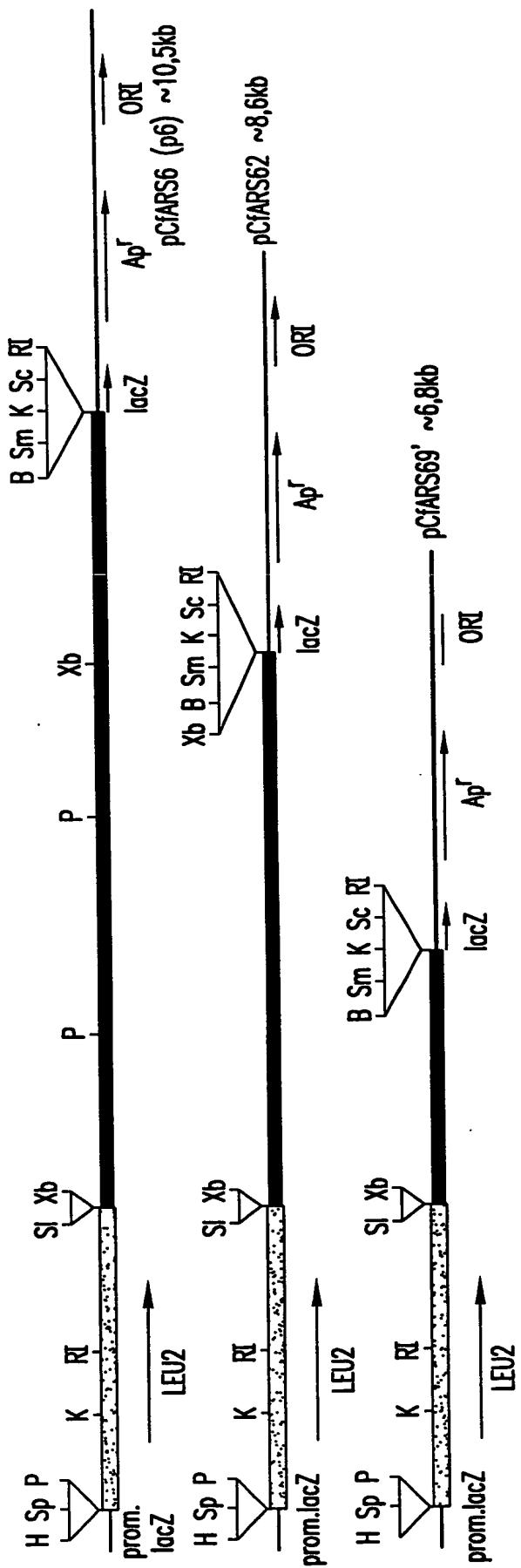


FIG. 7

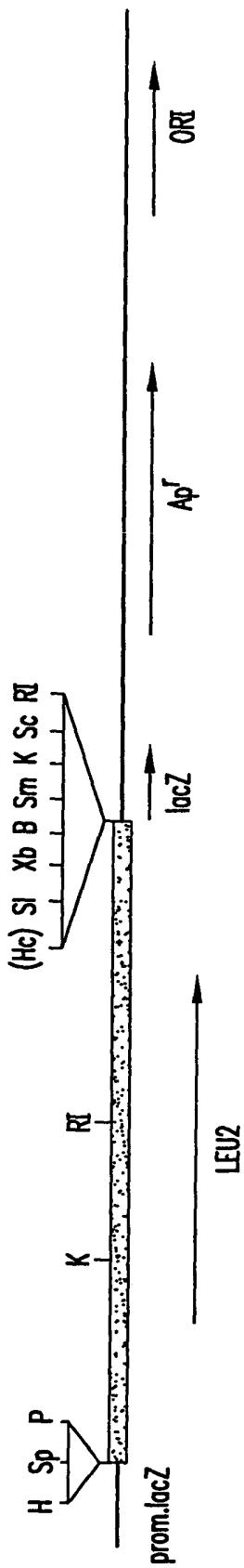


FIG. 8

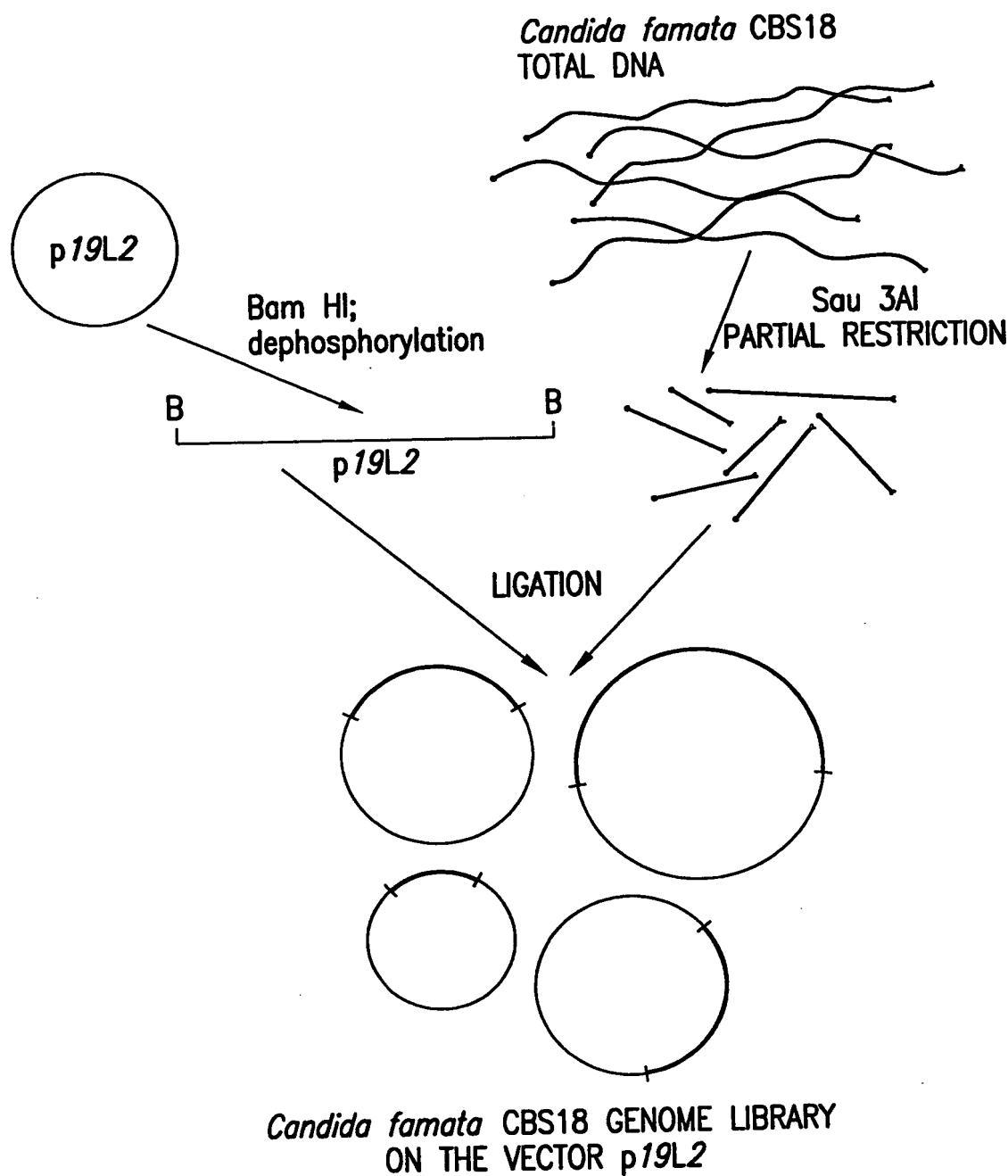


FIG.9

09903508 . 043002

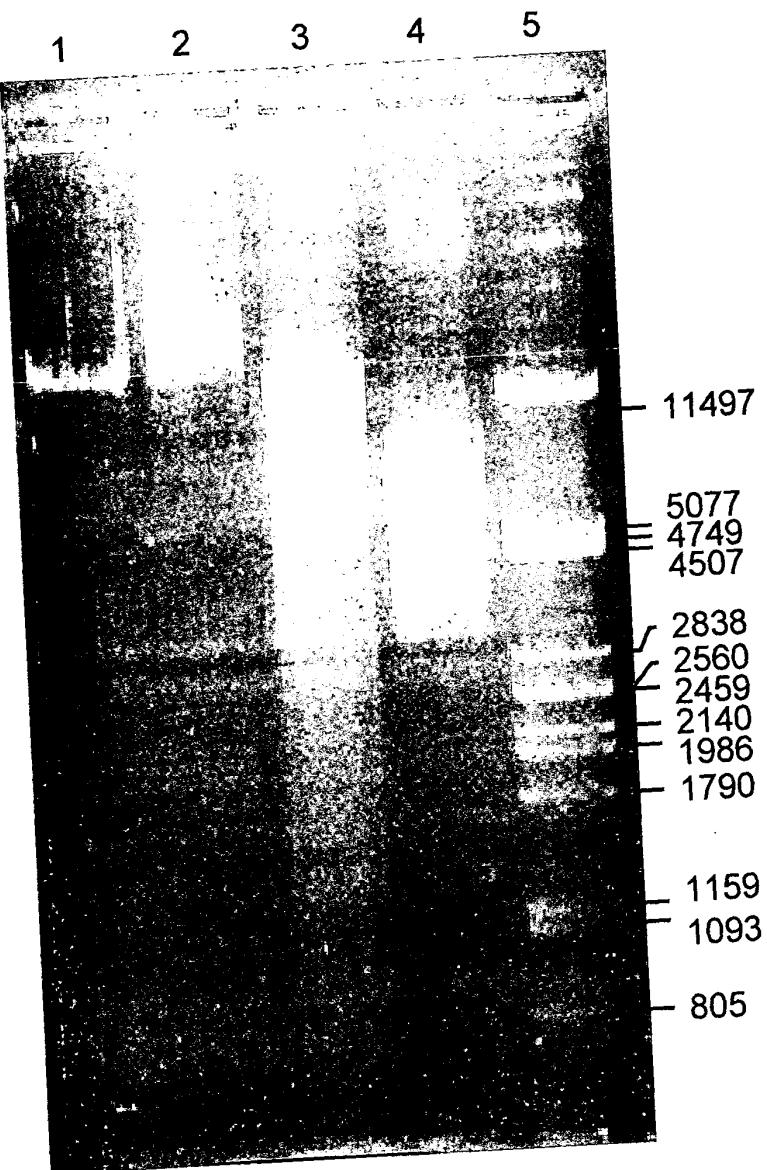


FIG.10

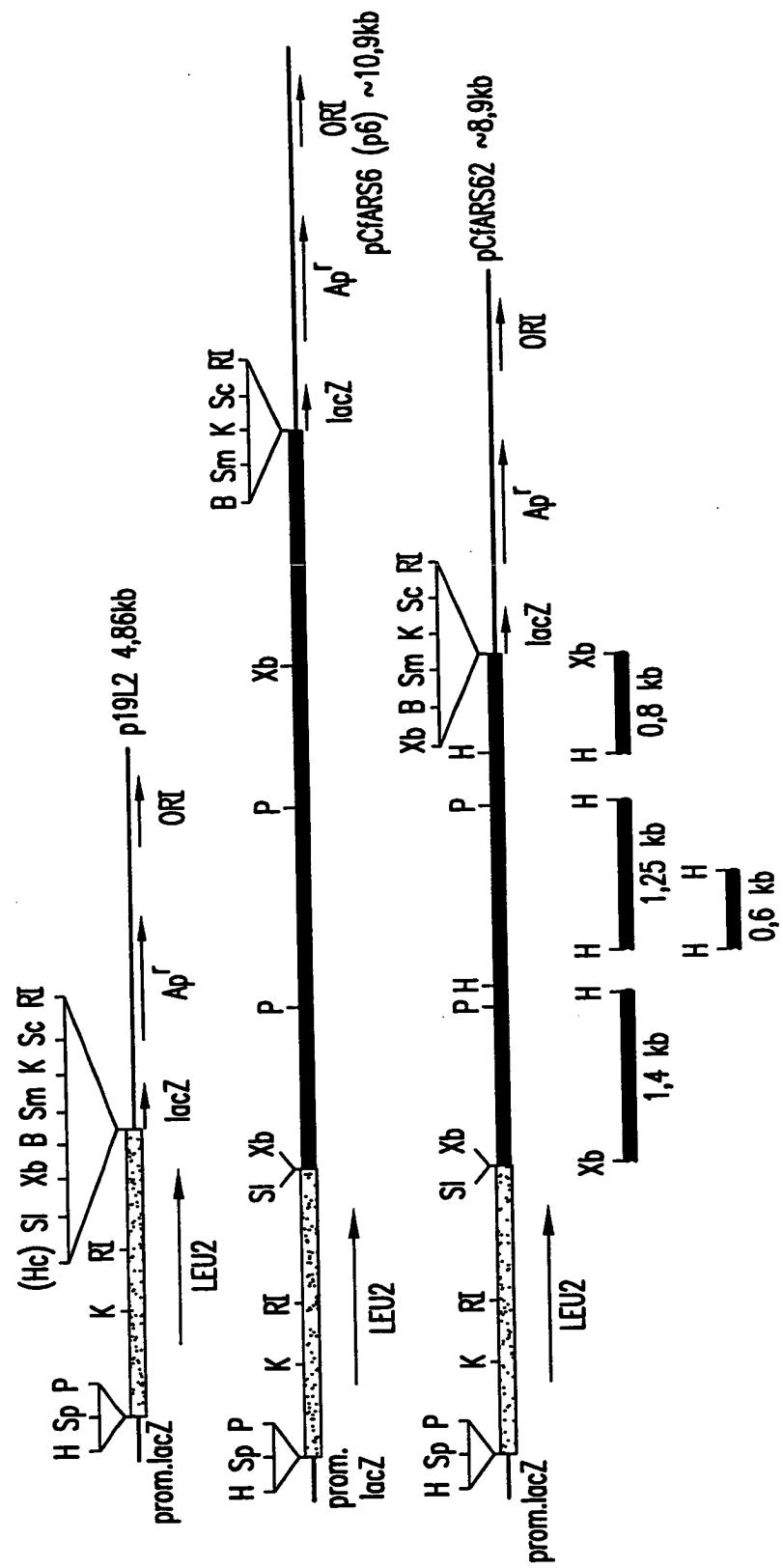


FIG. 11

o. 09/903,508; Filed: July 13, 2001
1533.0830003/MAC/RGM; Group Art Unit: 1645
Inventor(s): Abbas *et al.*; Tel: 202/371-2600
Title: Transformation Systems for Flavinogenic Yeast

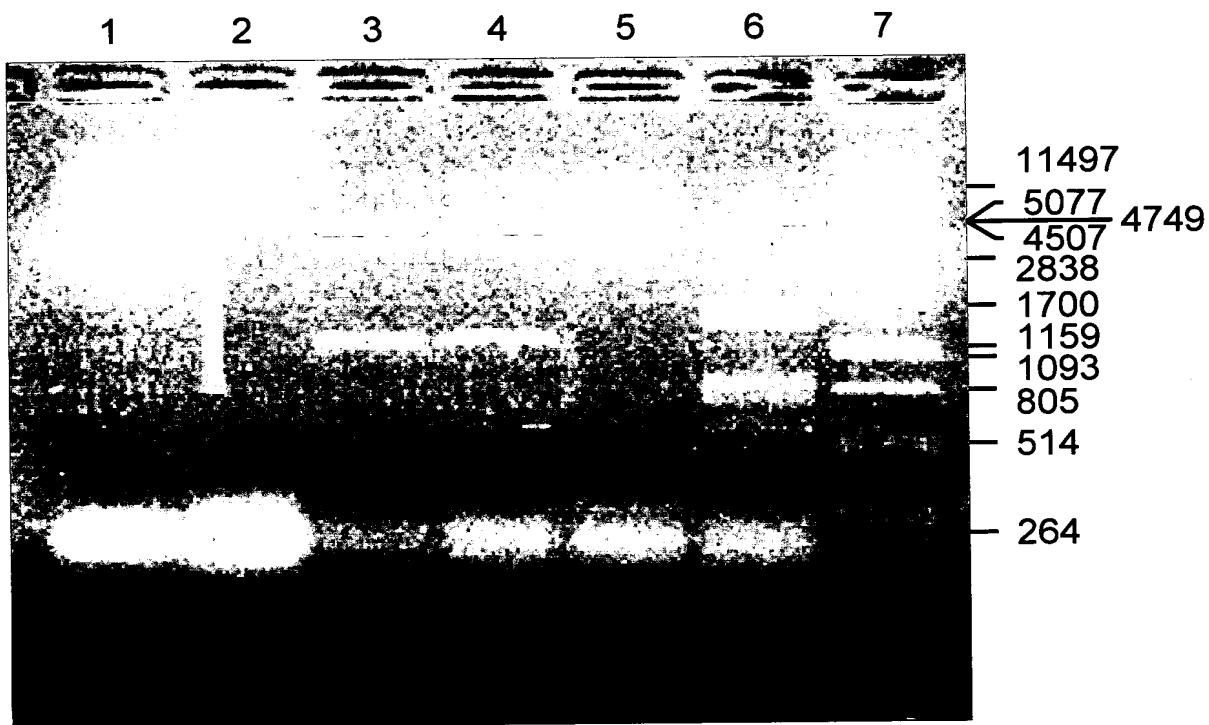


FIG.12

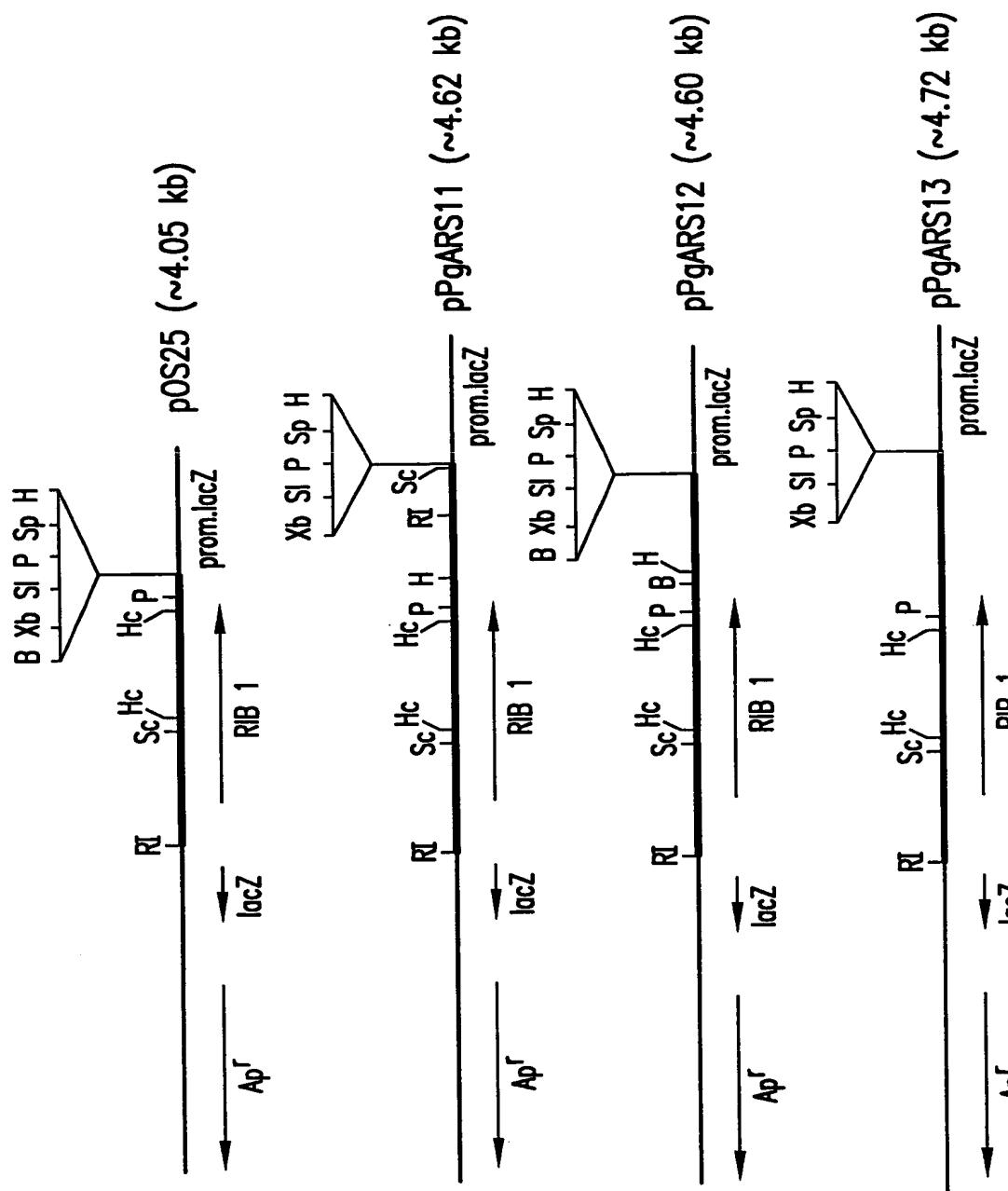


FIG. 13

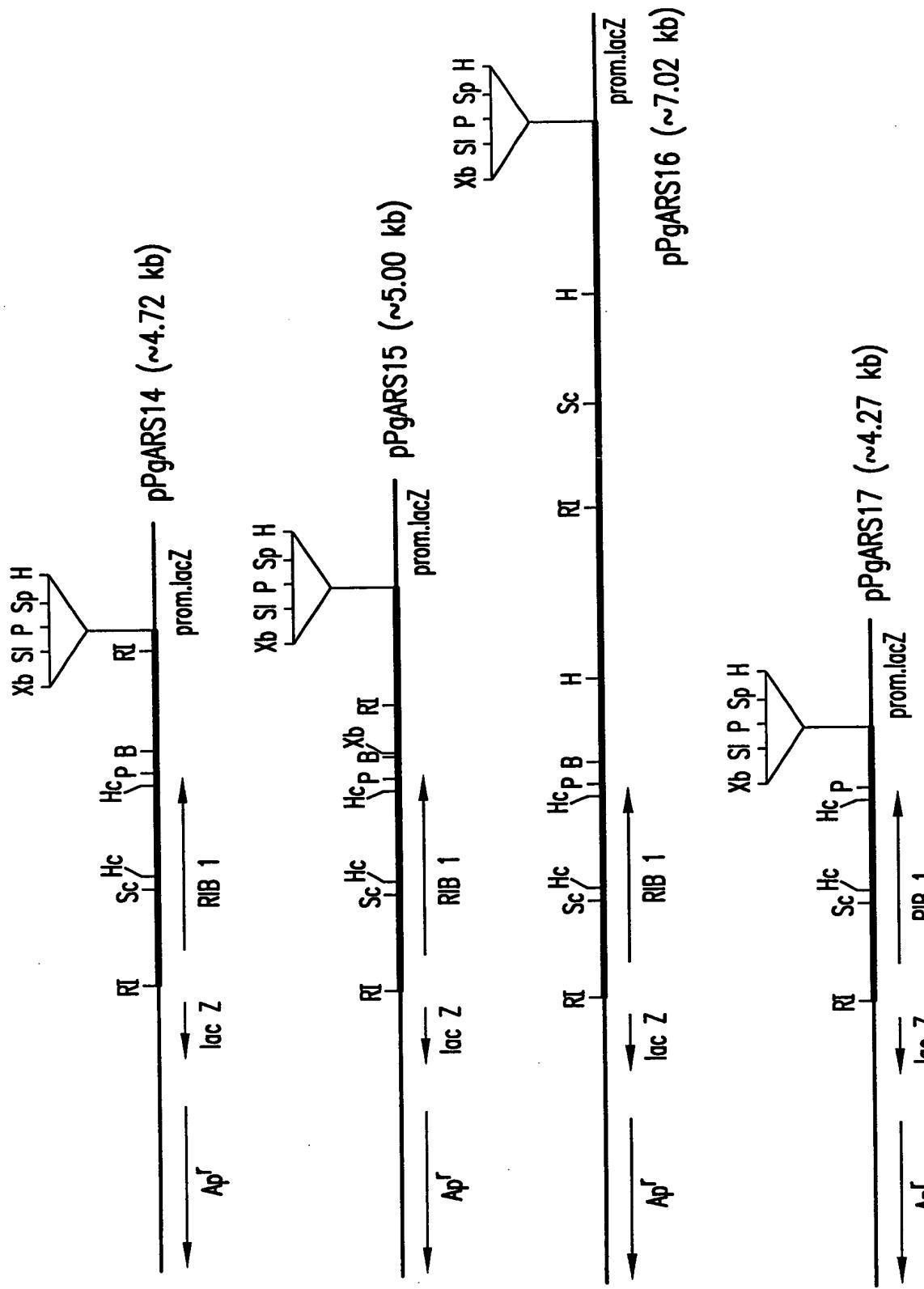


FIG. 14

<400> 1

cttgactgat tacgaattcg agctcggtac ccggggatca tgaatgctag tcttttaca 60
ctgaatattt ttttaacgt ttttaataa ttttgcatac atttaagaaa aaccacaaat 120
ggttttccaa aatttaaatt gatttttag aaagtcctaa aaaatagaat cataccaaat 180
aaagaacaac ttaaagtac tatgacaaat tcagaaatac aatcgatg tccgttcatg 240
gataaagctg caaagtaca agcaaggcta actaagatcc tctaggggaa tcctctagag 300
tcgactacgt cgtaaggcc gtttctgaca gagtaaaatt cttgagggaa ctttcaccat 360
tatggaaat gttcaagaa ggtattgact taaactccat caaatggtca ggtcatttag 420
tgtttttat ttgttgtatt ttttttttt tagagaaaat cctccaatata ataaatttagg 480
aatcatagtt tcatgatttt tagagaaaat cctccaatata ataaatttagg aatcatagtt 540
tcatgatttt ctgttacacc taacttttg tgtggngccc tcctccttgc caatattaat 600
ctgttacacc taacttttg tgtggngccc tcctccttgc caatattaat gttaaagtgc 660
aattctttt ccttatcacg ttgagccatt agtatcaatt tgcttacctg tattccttta catcctcctt 720
ccttatcacg ttgagccatt agtatcaatt tgcttacctg tattccttta catcctcctt 780
tttctccttc ttgataaaatg tgcttacctg tattccttta catcctcctt tttctccttc 840
ttgataaaatg tatgttagatt gcgtatatac tttcgtctac cctatgaaca tattccattt tctaatttcg 900
tatgttagatt gcgtatatac tttcgtctac cctatgaaca tattccattt tctaatttcg 960
tgtcgnttct attatgaatt tcatttataa agttatgtt tctaatttcg ggcgttctt 1020
ttatgaattt catttataaa gtttatgtcc aatatcataa aaaaagagaa tcttttaag 1080
caanggattt cttactcaa atatcataaa aaaagagaat cttttaagc aagggatttt 1140
cttaacttnt tcggggacgc atccccgctt cgngngactg gtggaccctt aaatctntc 1200
ggcgacagca tcccgaactc ggnngnactg tggaaaccctt aaatcccagt ntgatccctgc 1260
ttccaaanct ttactggtn ttcatggcc tacccagtt ctgaacctgc atccaaanct 1320
tttactgctc ttcaaggct tacctntca ggcaggtcaa tgacaattca catcntgcnc 1380
anacnaaaaaa nggctttca gcaggtcaan gcaatttcac atcntgcnc aaaananagt 1440
ggcgatnggg tgacctntnt ttggcaacga tngggtgacc tatntttgca aac 1493

FIG. 15

tatgcacatt cgcacgcccga ggtgcagcgt ttaggcgcgg ctcacacggaa gccaacggcc 60
gccacaaatt gtccggaaag tcgccgaaac tgatccactg gtaccacagc cccataagaa 120
ccccctttaa tattaaaaac cgttcttcag ccactttga tcacattgtt tgcagccgcc 180
cgttgctgcc atccaaacac cacgcgtccc ccgcaccctt ttacggtgcc cactgcattg 240
gaatttgcac aaaacagcct cacgaagtgg attaattttt agagcactca agtcatcatg 300
ctgcaatctc tgcatcatga aatgactccc gttgatacag ggaactcaga ccccaagcgg 360
cgaagagtca caagagcgtg tgatgtgtgt cgactctaga ggtatccccgg gtac 414

FIG. 16

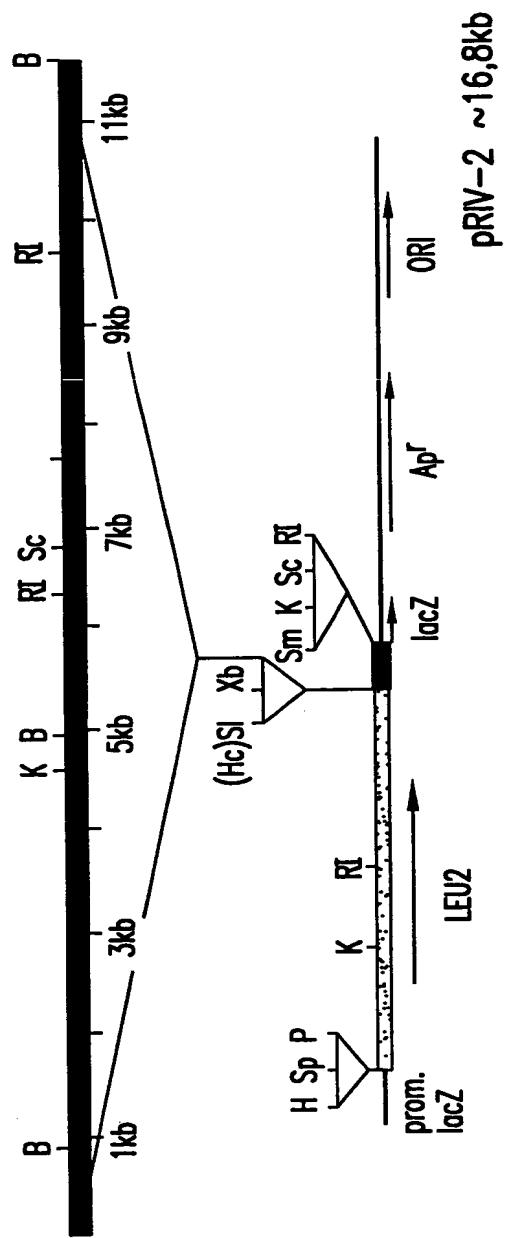


FIG. 17

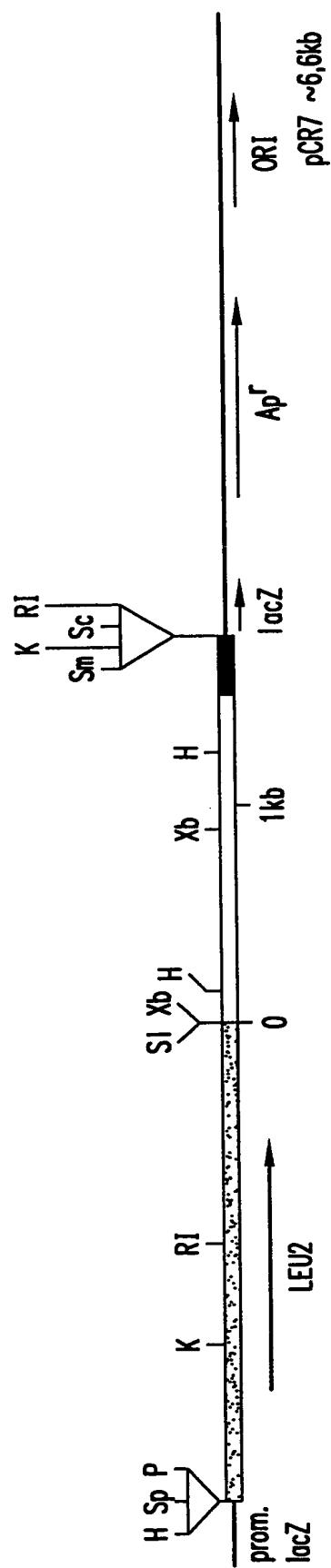


FIG. 18

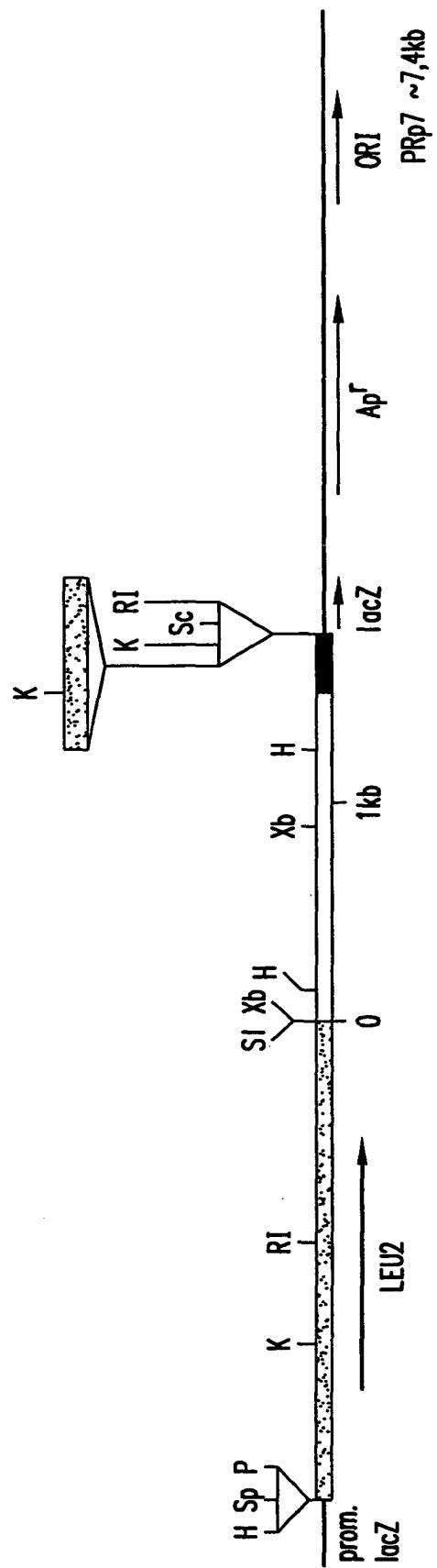


FIG. 19

tgattacgaa ttcgagctcg gtacccgggg atcatgaatg cttagtcttt tacactgaat 60
attttttaa cgattttta ataattttgc aatcatttaa gaaaaaccac aaatggttt 120
ccaaaattta aattgatttt ttagaaagtc ctaaaaaata gaatcataacc aaataaaagaa 180
caacttaaag tcactatgac aaattcagaa atacaatcgt atgatccgtt catggataaa 240
gctgcaaagt cacaagcaag gctaactaag atcctctaga gtcgactacg tcgttaaggc 300
cgtttctgac agagtaaaat tcttgaggga actttcacca ttatggaaa tggttcaaga 360
aggattgac ttaaactcca tcaaatggtc aggtcattga gtgtttttta tttgntgtat 420
ttttttttt ttagagaaaa tcctccaata tataaatttag gaatcatagt ttcatgattt 480
tctgtta 487

FIG.20

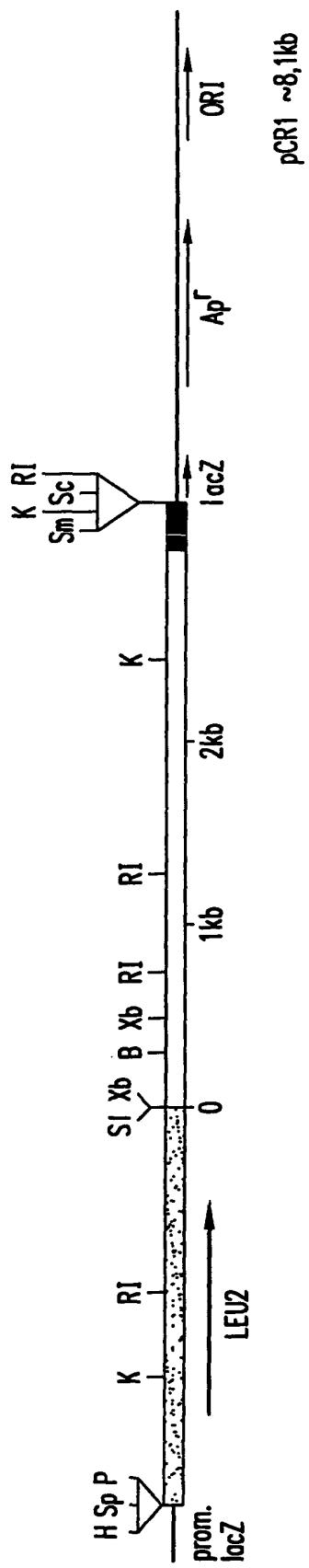


FIG. 21

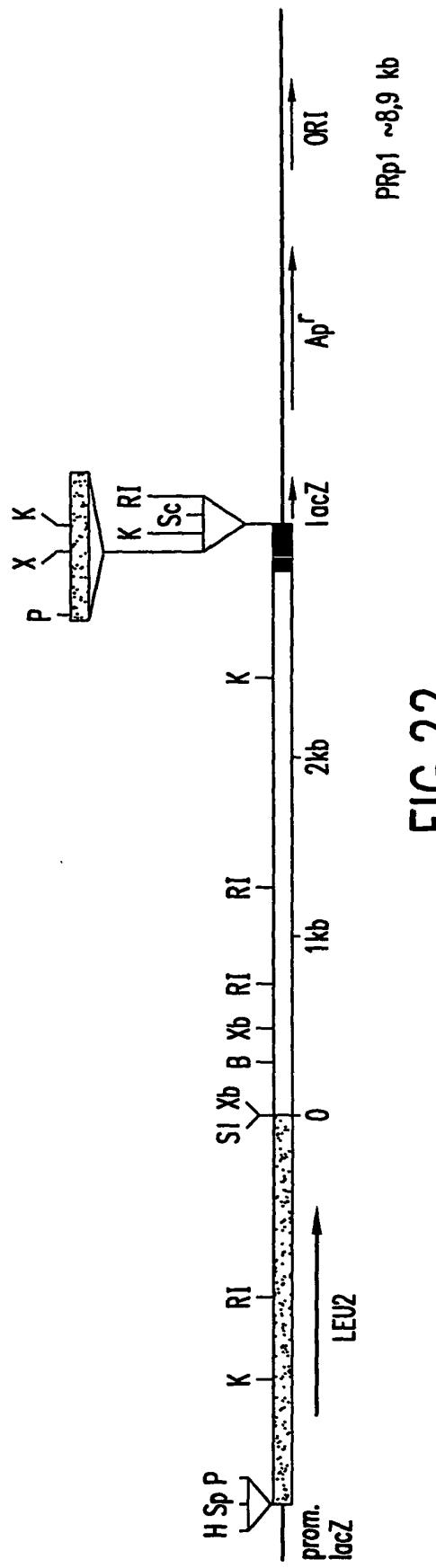


FIG. 22

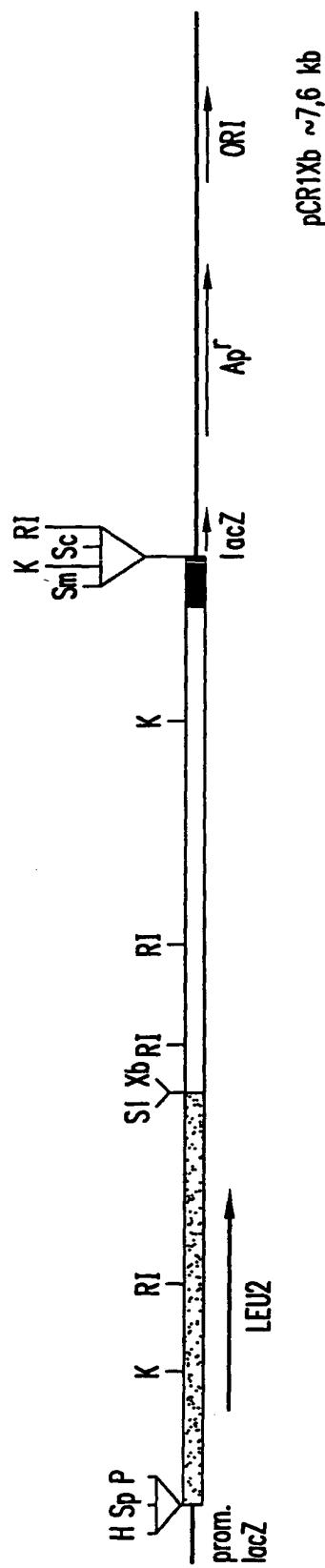


FIG. 23

No. 09/903,508; Filed: July 13, 2001
 No. 1533.0830003/MAC/RGM; Group Art Unit: 1645
 Inventor(s): Abbas *et al.*; Tel: 202/371-2600
 Title: Transformation Systems for Flavinogenic Yeast

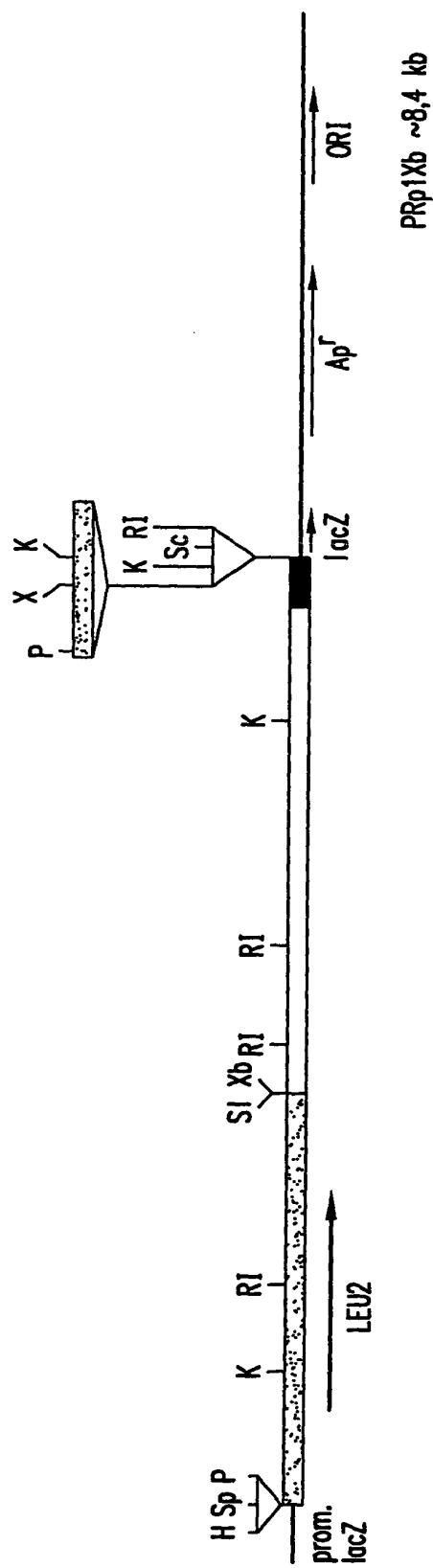


FIG. 24

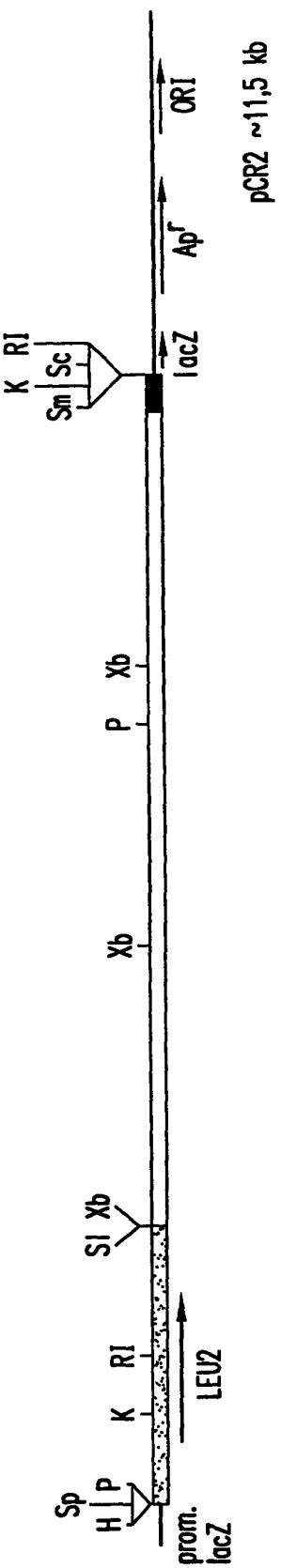


FIG. 25

Appl. No. 09/903,508; Filed: July 13, 2001
Art. No. 1533.0830003/MAC/RGM; Group Art Unit: 1645
Inventor(s): Abbas *et al.*; Tel: 202/371-2600
Title: Transformation Systems for Flavinogenic Yeast.

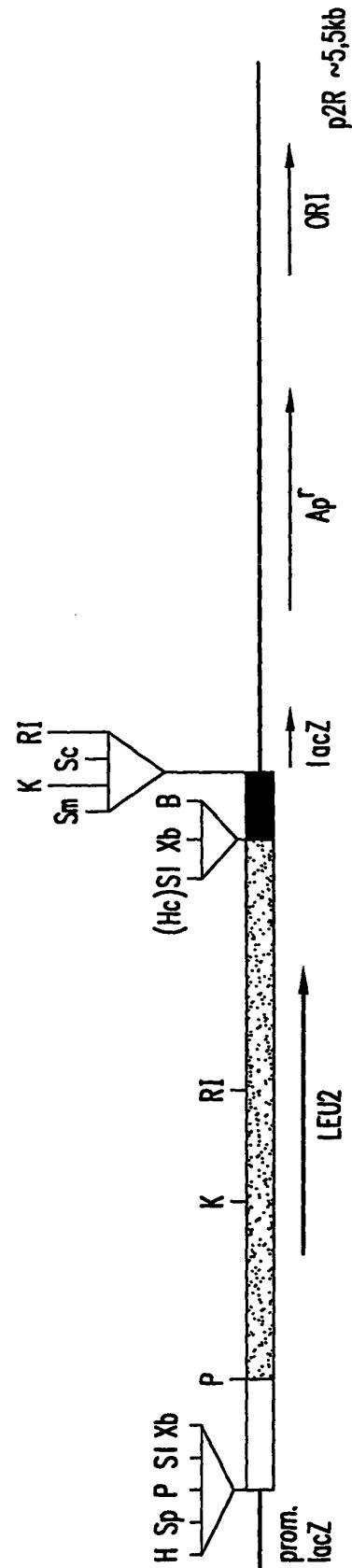


FIG. 26

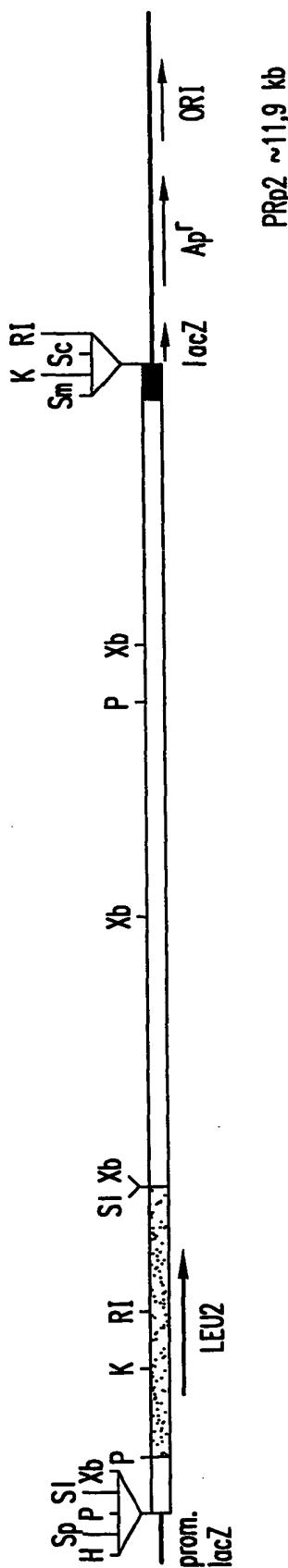


FIG. 27

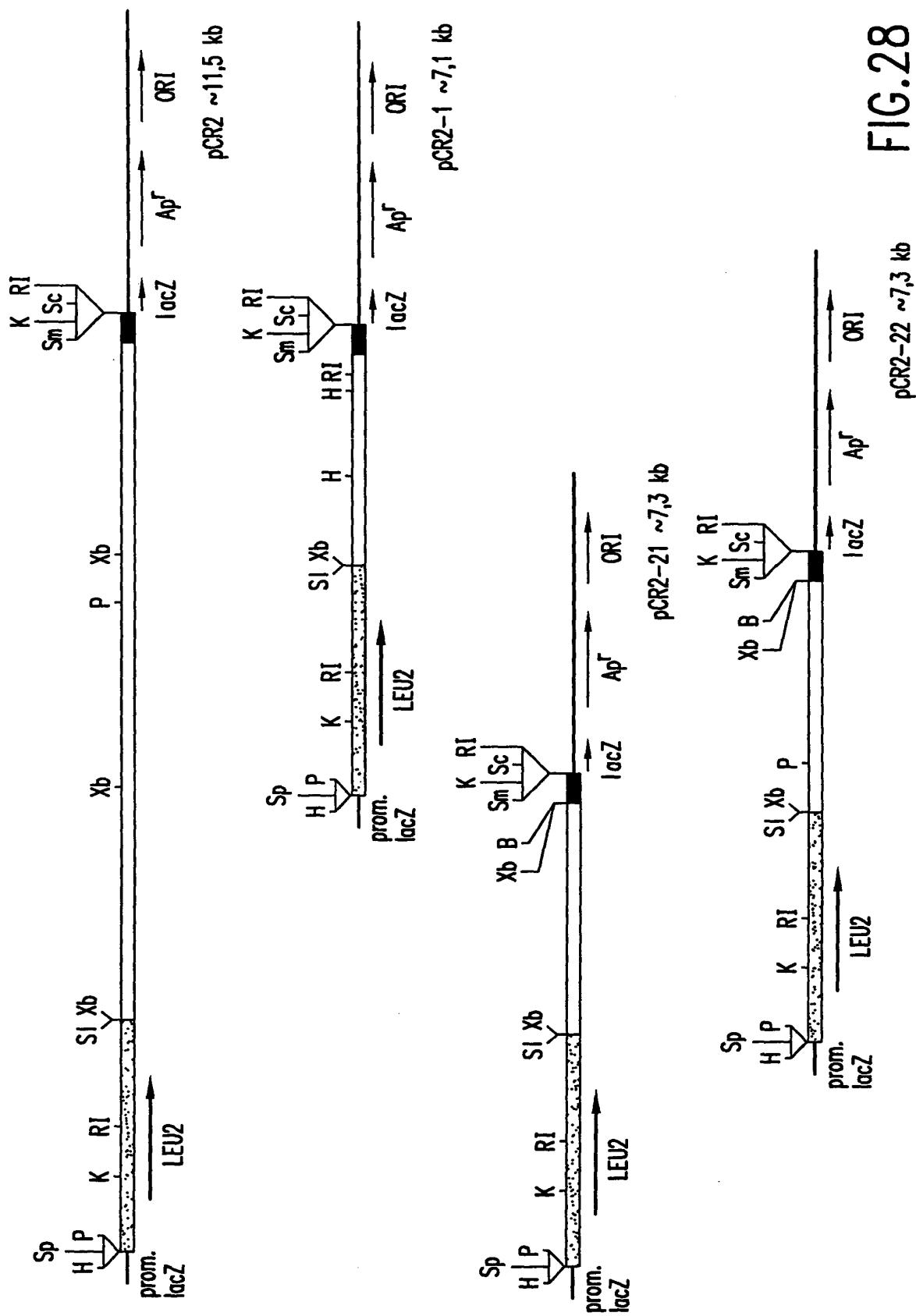


FIG. 28

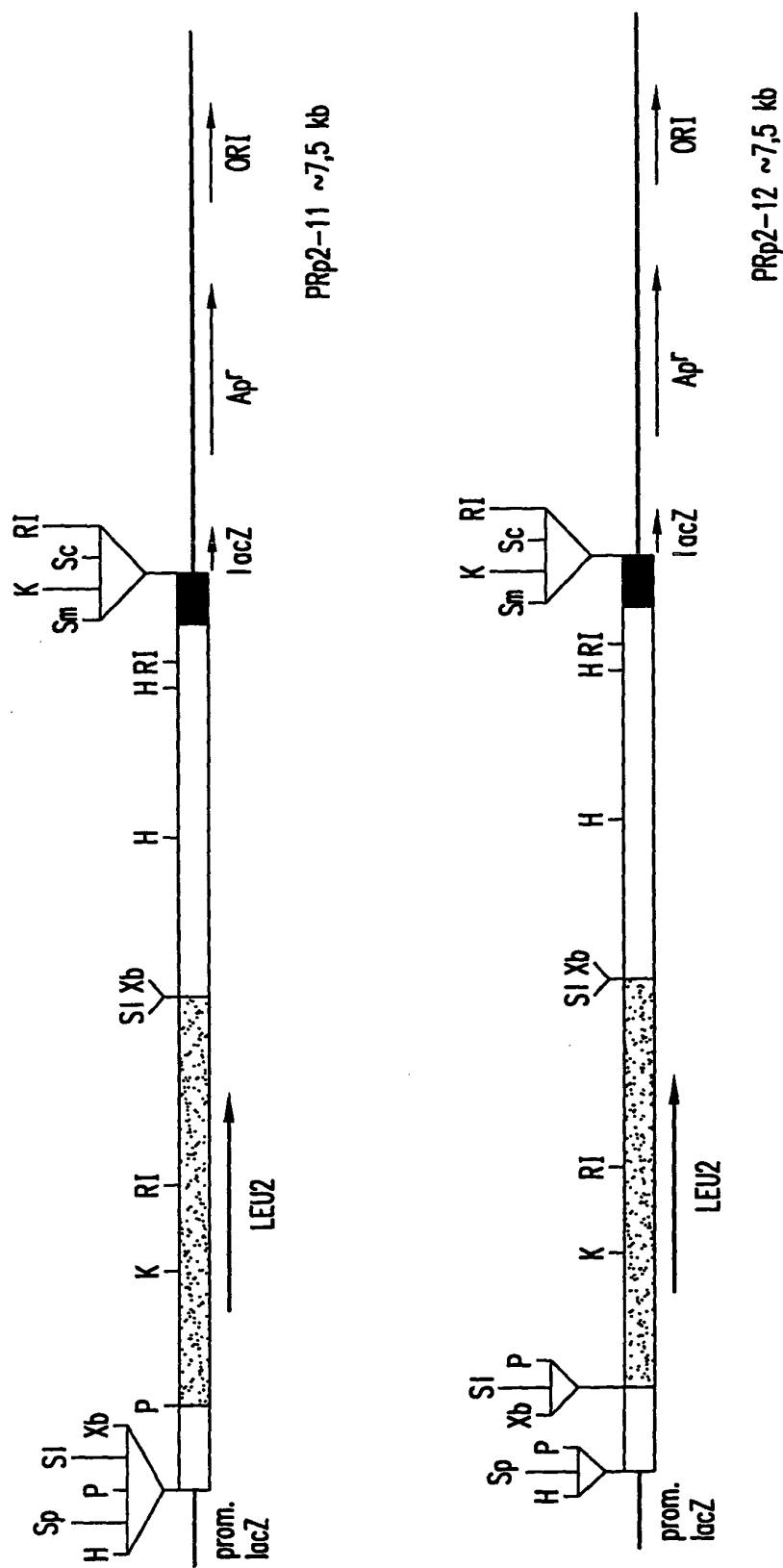


FIG. 29

Appl. No. 09/903,508; Filed: July 13, 2001
 Appl. No. 1533.0830003/MAC/RGM; Group Art Unit: 1645
 Inventor(s): Abbas *et al.*; Tel: 202/371-2600
 Title: Transformation Systems for Flavinogenic Yeast

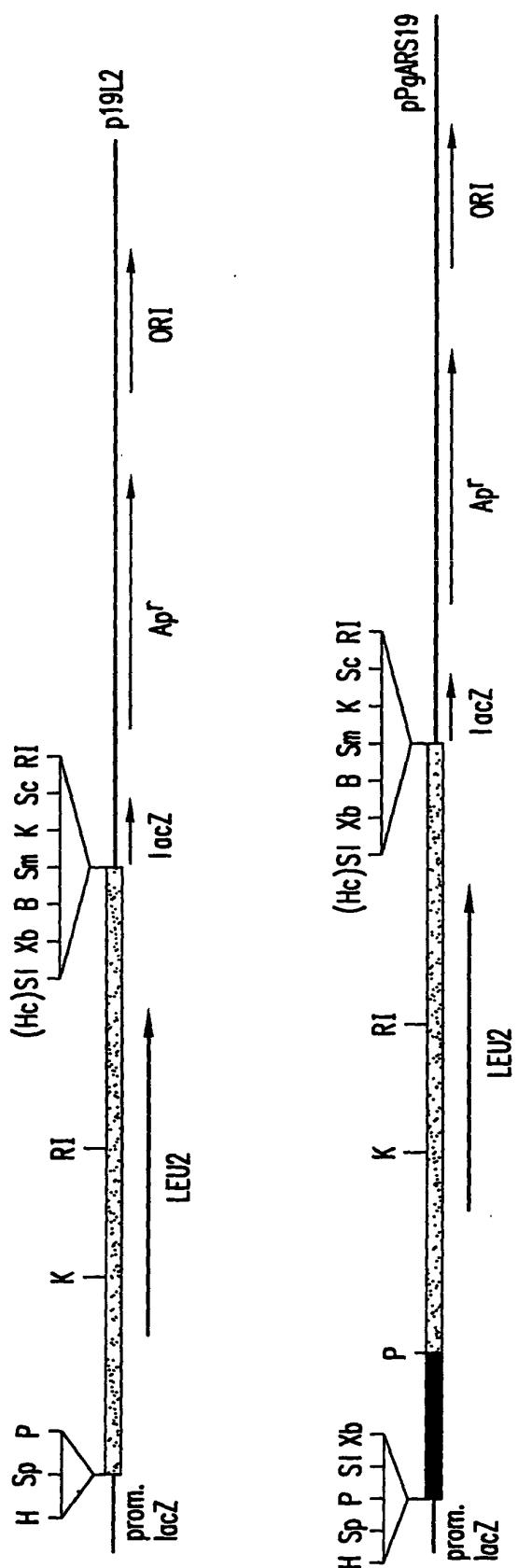


FIG. 30

Appl. No. 09/903,508; Filed: July 13, 2001
 Dkt. No. 1533.0830003/MAC/RGM; Group Art Unit: 1645
 Inventor(s): Abbas *et al.*; Tel: 202/371-2600
 Title: Transformation Systems for Flavinogenic Yeast

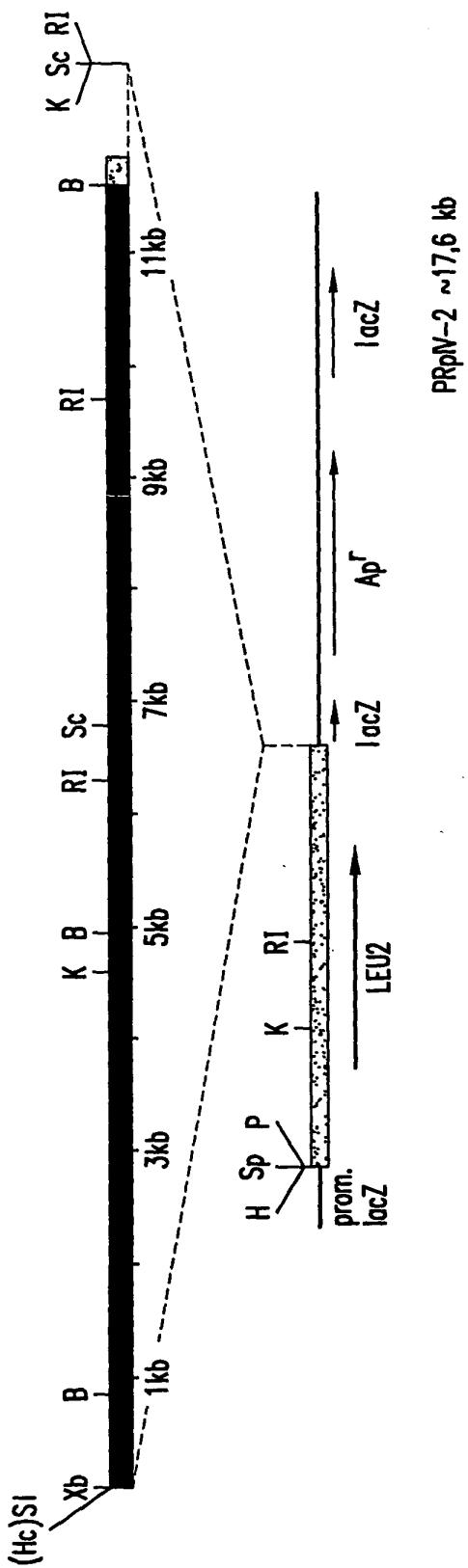


FIG. 31

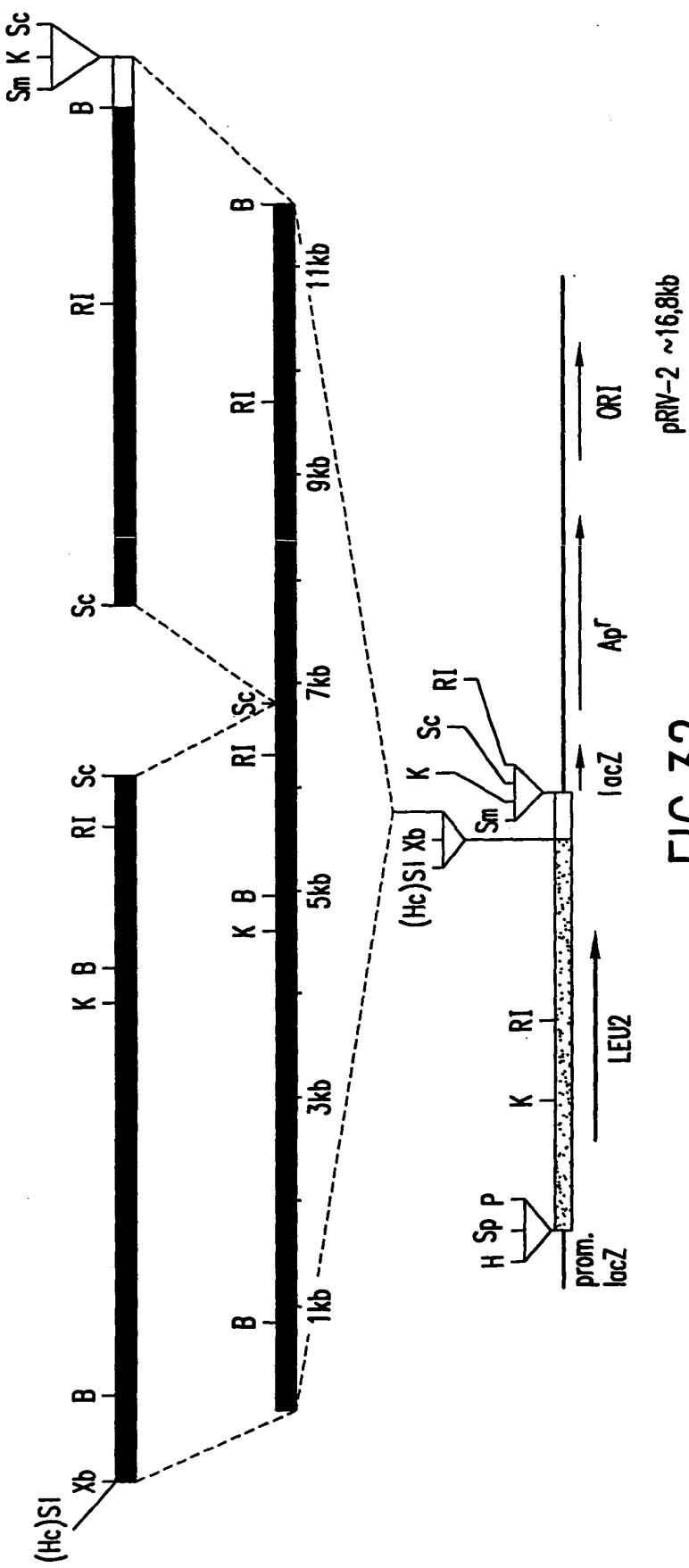


FIG. 32

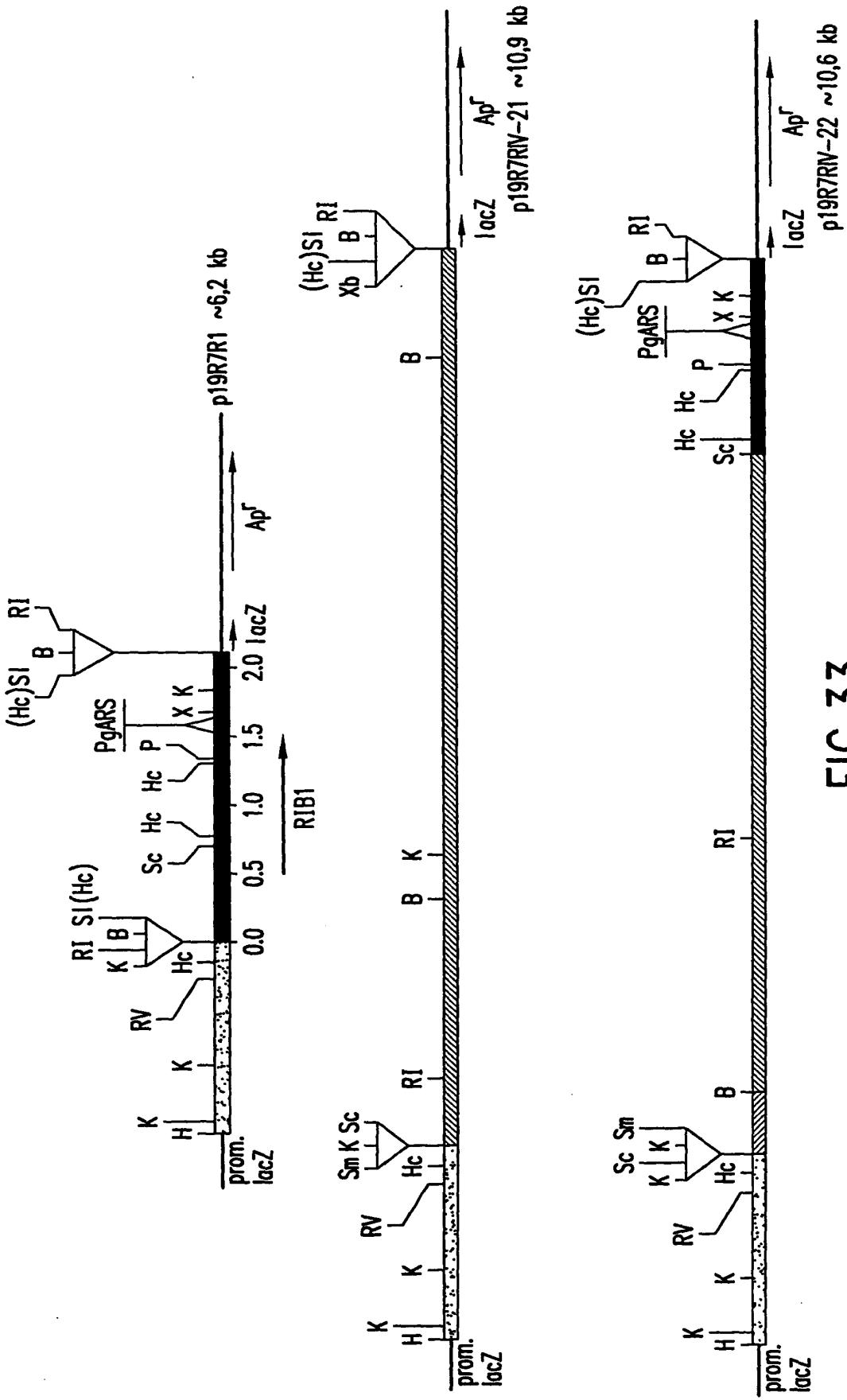


FIG. 33

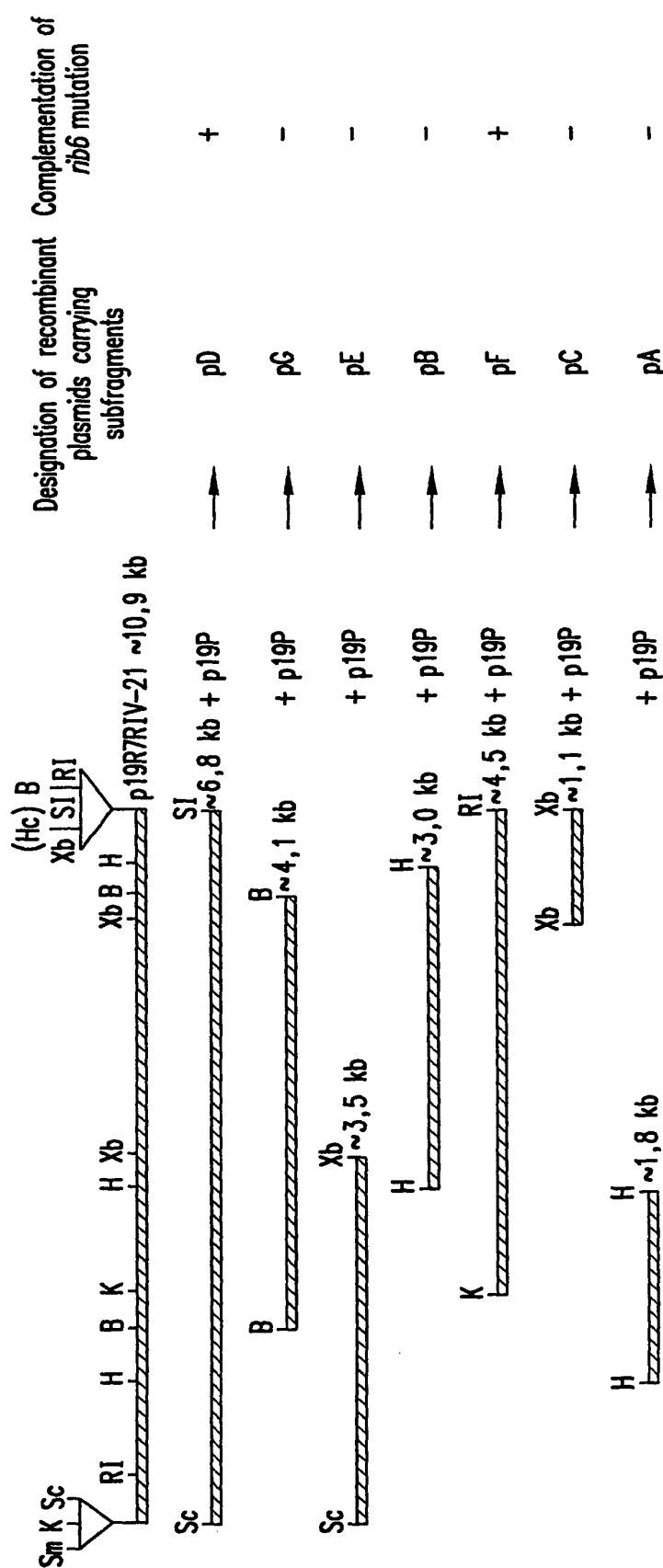


FIG. 34

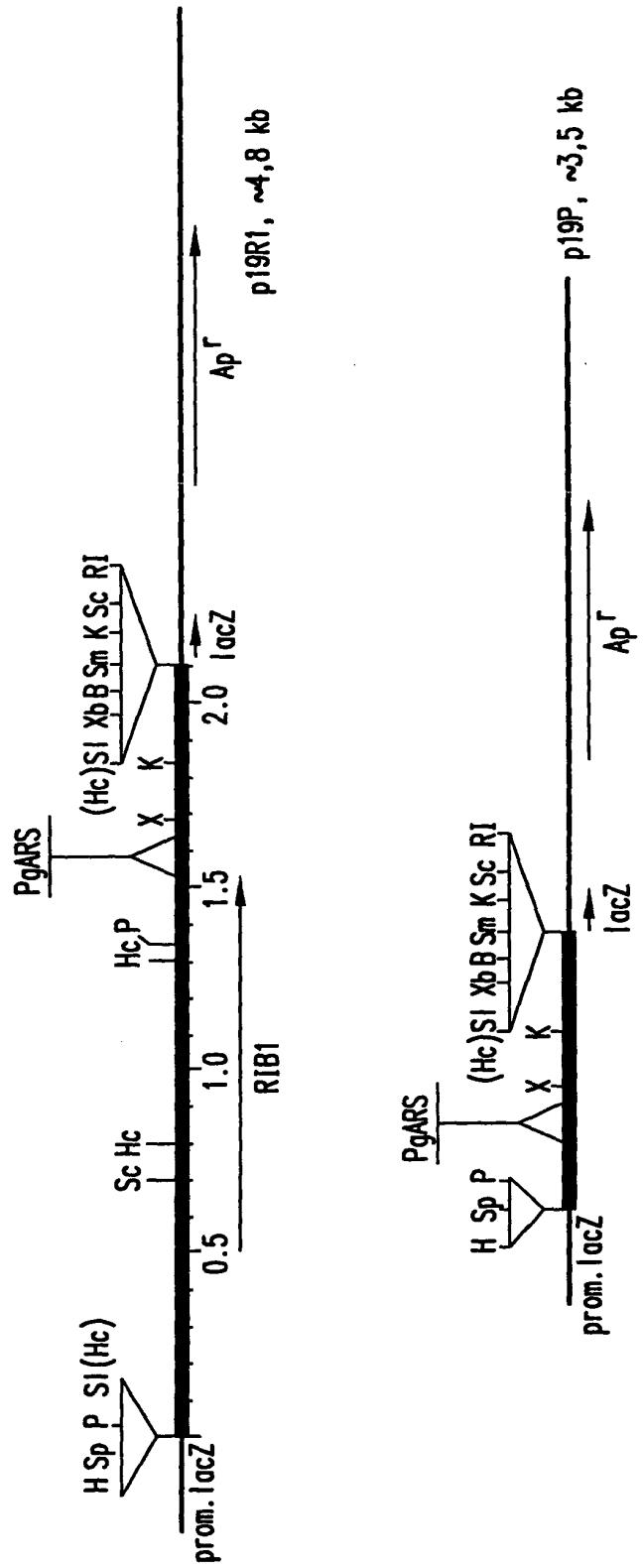


FIG. 35

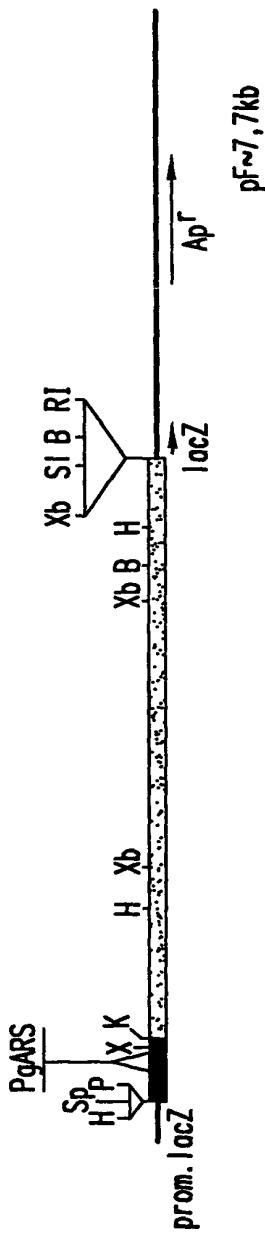


FIG. 36

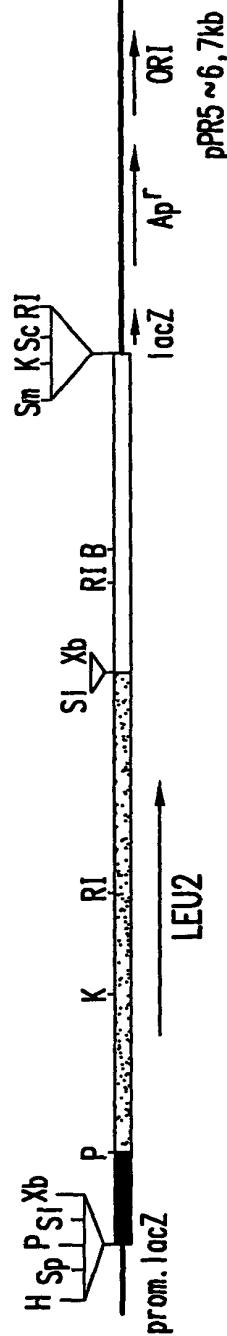


FIG. 37

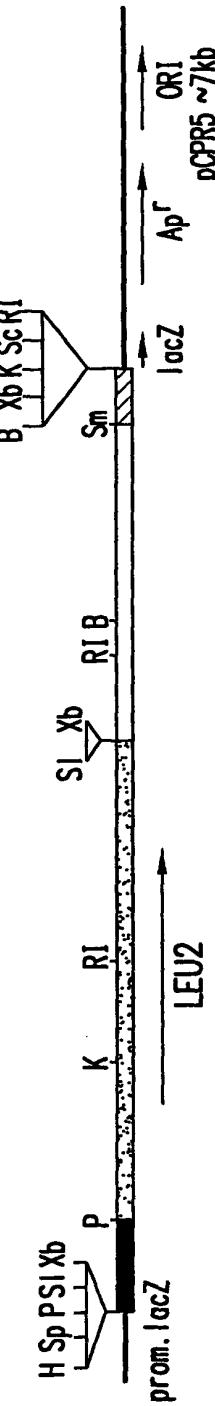


FIG. 38

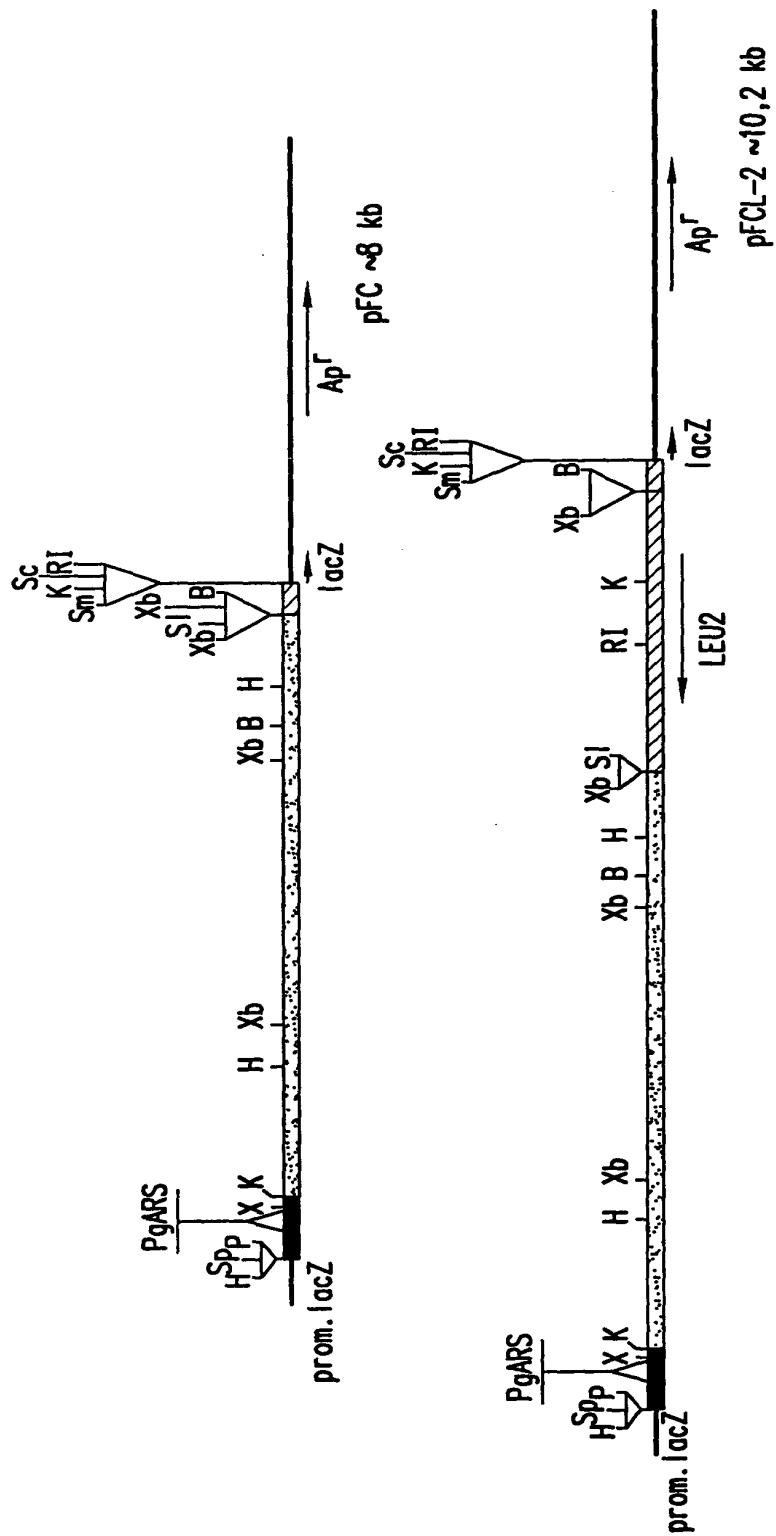


FIG. 39

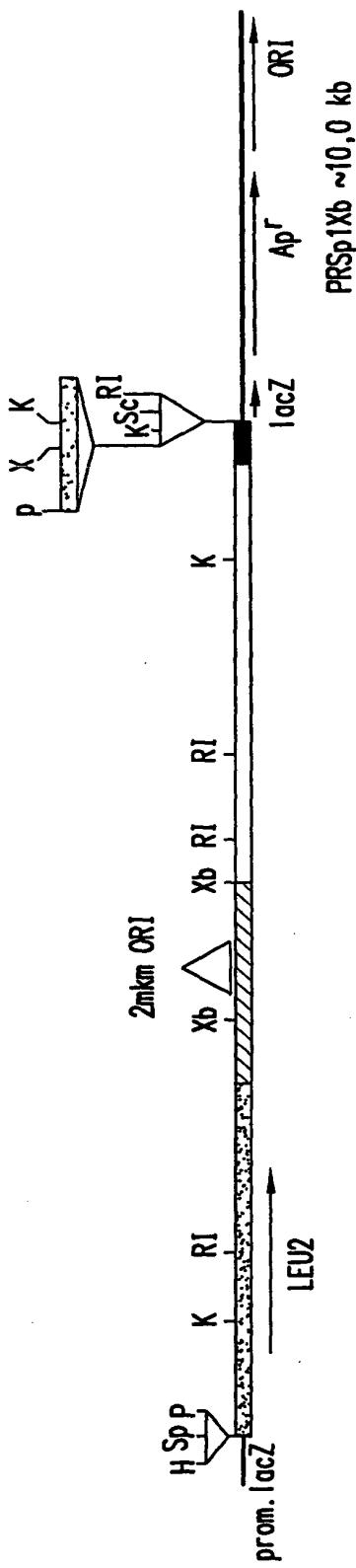


FIG. 40

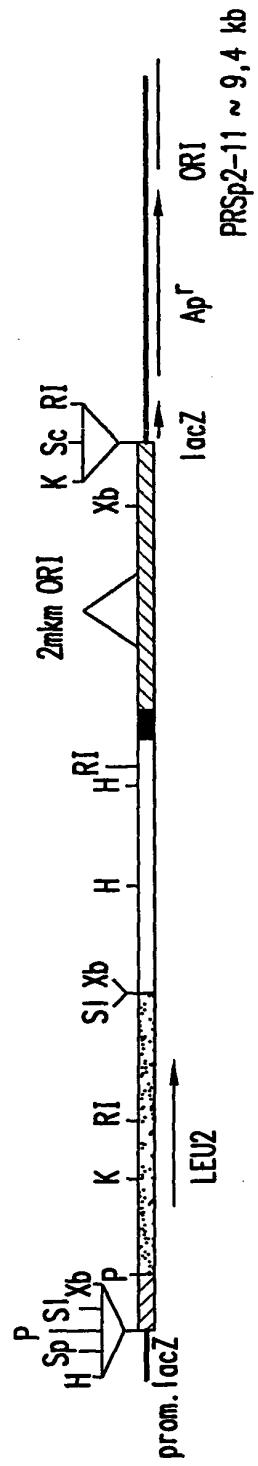


FIG. 41

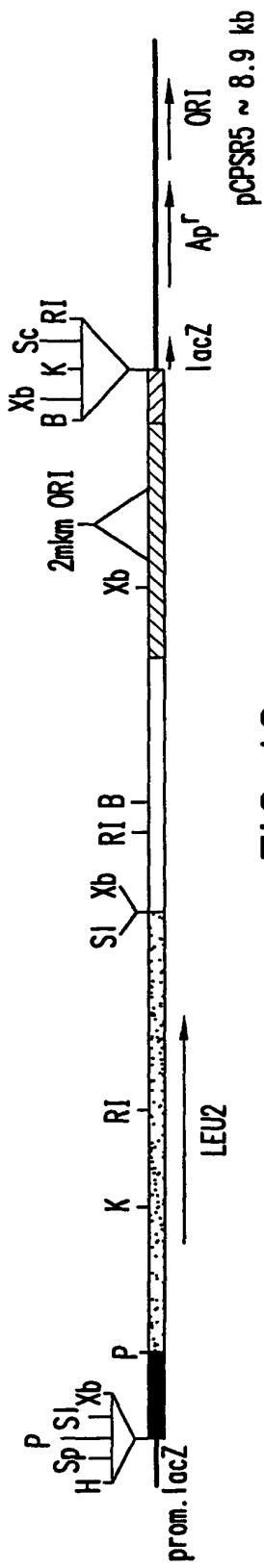


FIG. 42

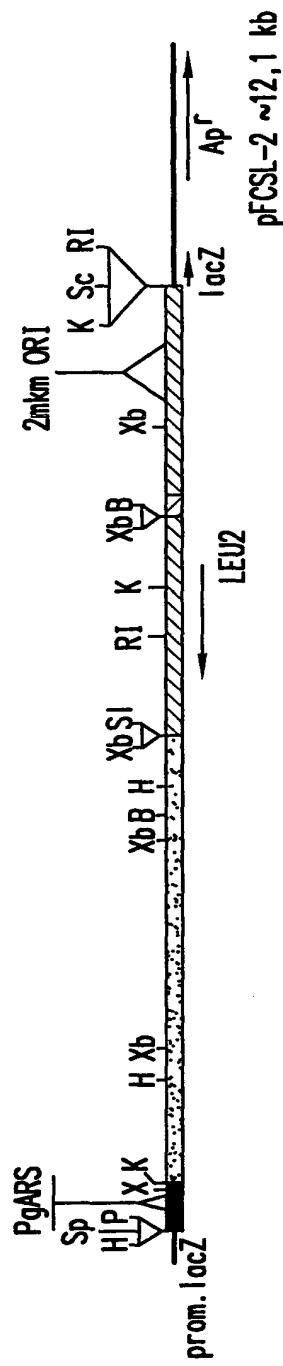


FIG. 43

App. No. 09/03,508; Filed: July 13, 2001
Dkt. No. 133.0830003/MAC/RGM; Group Art Unit: 1645
Inventor(s): Abbas *et al.*; Tel: 202/371-2600
Title: Transformation Systems for Flavinogenic Yeast

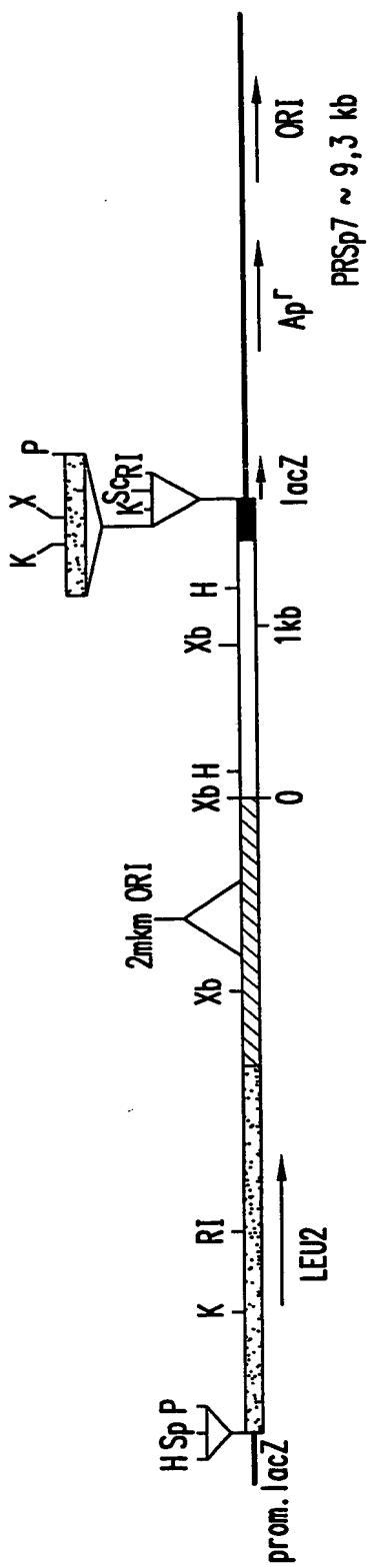


FIG. 44

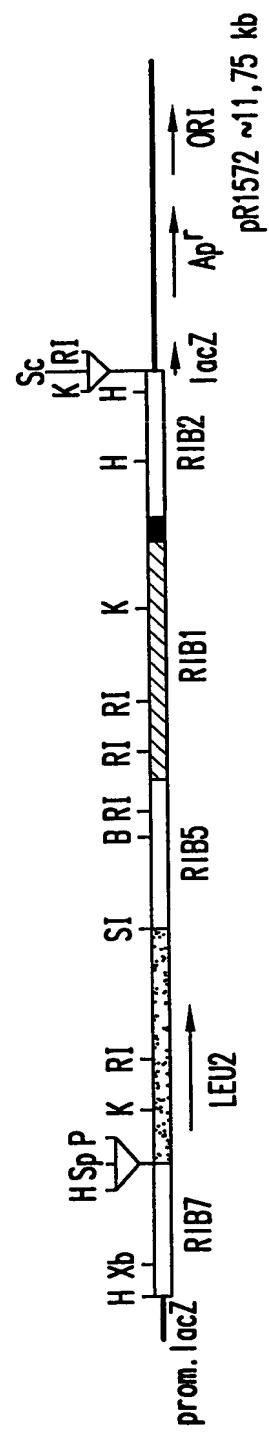


FIG. 45